

### REMARKS

Claims 1-33, 125-127 and 129-137 are presented for consideration by the Examiner. Some of the claims have been amended in response to the rejections and remarks in the Office Action mailed July 1, 2004, and every ground of rejection has been addressed.

#### I. EXAMINER INTERVIEW WAS HELD

A telephone interview was held with the Examiner on December 1, 2004. The Examiner's remarks were helpful in assisting applicant's counsel in focusing on elements the Examiner considers most promising. The Examiner agreed, subject to further review of the prior art, that the points raised in the interview may render the claims allowable. A report of the substance of the interview is contained in the remarks below.

The amendments above were made in accordance with the discussion in the interview, and applicant makes the following points of law and fact in further support of said amendments. The amendments made herein are believed to place the application in condition for allowance. The amendments are made without prejudice to any future submission of the original claims in a subsequent application.

## II. OBJECTIONS TO DRAWINGS AND DISCLOSURE ARE TREATED

Responsive to the objection made to the drawings, applicant respectfully proposes a corrected version of FIG. 1 as submitted herewith in the form of a "Replacement Sheet." FIG. 1 has been amended to include reference numeral 44 directed to the central incisor tip sensors, as discussed on page 25, line 16 of the specification.

Regarding the objection to the drawings for including reference numeral "15" in FIG. 2 without including the reference numeral in the description, the specification has been amended such that reference numeral 15 is now in the specification.

Regarding the objections to the disclosure, the various informalities objected to have been corrected by amendment consistent with the suggestions and remarks in the Office Action.

## III. REJECTIONS OF CLAIMS UNDER 35 U.S.C. § 102 ARE TREATED

Claims 1-33 and 125-129 were rejected under 35 U.S.C. § 102(b) as being anticipated by a reference entitled *Articulation, A Physiological Approach*, by Samuel G. Fletcher (hereinafter "the Fletcher reference").

Regarding the rejection of the claims under 35 U.S.C. § 102, applicant's counsel has carefully studied the reasoning for the rejection provided in the Office Action, together with the prior art references cited. Applicant respectfully submits in good faith

that certain aspects of the invention are unanticipated, nonobvious and allowable. Additional limitations have been incorporated into the independent claims, without prejudice to any future submission of the original claims in another application, which are believed to render said claims allowable.

Regarding claims 1, the subject matter of claim 128 has been added to claim 1 including "displaying a model representation of a contact between a model lip and teeth during speech." The Fletcher reference does not disclose this subject matter. Rather the Fletcher reference only discloses modeling and detecting of contact between a tongue and sensors.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegall Bros. V. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Since the Fletcher reference does not disclose each and every element of claim 1 as amended, the Fletcher reference fails to anticipate that claim. Moreover, the Fletcher reference and the other prior art references of record fail to teach or suggest all of the subject matter now required by claim 1. Accordingly, claim 1 is believed to be allowable.

Dependant claims 2-7, 9-26, 28-33, 126, and 129 depend from claim 1 or a claim depending from claim 1, and are therefore

believed to be allowable for at least the reasons given in support of claim 1.

Regarding claim 8, claim 8 has been written into independent form. Claim 8 requires the step of automatically generating learning curve plots illustrating the ability of the learner to mimic the model. This subject matter is not disclosed, taught or suggested by the Fletcher reference or the other prior art references of record. Accordingly, claim 8 is believed to be allowable.

Regarding claim 27, this claim has been written into independent form and includes the requirement of displaying a dental landmark on the computer screen to assist in orienting the position of contact between the learner's tongue and mouth. This subject matter is not disclosed, taught or suggested by the Fletcher reference or the other prior art references of record. Accordingly, claim 27 is believed to be allowable.

Regarding claim 125, subject matter has been added to the claim including:

wherein the method further comprises displaying a model representation of a contact between a model lip and teeth during speech;

wherein the method further comprises displaying a representation of a contact between a learner's lip and teeth during speech; and

automatically generating learning curve plots illustrating the ability of the learner to mimic the contact of the model tongue and mouth and the model lip and teeth.

This subject matter is supported in the disclosure, *inter alia*, claims 128, 129, and 8, and is therefore not new matter. As discussed, above with regard to claims 1 and 8, this subject matter is not disclosed taught or suggested by the Fletcher reference or the other prior art of record. Accordingly, claim 125 is believed to be allowable.

Regarding claim 127, the step of replaying the recorded position of contact between the learner's tongue and mouth during speech in synchronism with the recorded model representation is required. This subject matter is not disclosed, taught or suggested by the Fletcher reference. For example, the last line of the first paragraph on page 248 of the Fletcher reference discloses that the display is switched back and forth between the clinician and the client. Accordingly, the display of clinician is played separately from the display of the client, rather than the displays being played in synchronism. Since the Fletcher reference and the other prior art references of record fail to disclose, teach or suggest all the subject matter required by claim 127, claim 127 is believed to be allowable.

New claims 130-137 have been added. New claim 130 includes subject matter from original claims 1-2 and the step of measuring

palatometric parameters, as supported, *inter alia*, on page 25, starting at line 4. New claim 131 is supported, *inter alia*, original claim 27. New claim 132 is supported, *inter alia*, original claim 8. New claims 133 and 136 are supported, *inter alia*, original claim 128. New claims 134 and 137 are supported, *inter alia*, original claim 129. Moreover, new claim 135, is supported, *inter alia*, as a combination of claims 127, 27, and 8. Accordingly, no new matter has been added.

Regarding new claim 130, subject matter is required including measuring palatometric parameters of the learner. The Fletcher reference and the other prior art references of record do not disclose, teach or suggest this subject matter. Accordingly, claim 130 is believed to be allowable.

Claims 131-134 depend from claim 130 or a claim depending from claim 130, and are therefore believed to be allowable for at least the reasons given in support of claim 130.

Regarding claim 135, claim 135 includes the subject matter as required by claim 127, and is believed to be allowable for at least the reasons given in support of claim 127.

Claims 136 and 137 depend from claim 135 or a claim depending from claim 135, and are therefore believed to be allowable for at least the reasons given in support of claim 135.

#### IV. CONSIDERATION OF PRIOR ART SUBMITTED BY APPLICANT

Applicant notes with appreciation the consideration by the Examiner of prior art references submitted on forms PTO-1449 dated November 14, 2001 and November 4, 2002. However, applicant also notes that supplemental information disclosure statements were filed with the PTO on October 18, 2002, and May 18, 2004. No initialed copies of the PTO-1449 forms were received with the Office Action pertaining to the supplemental information disclosure statements filed on these dates. The supplemental information disclosure statement filed on October 18, 2002 included only the Fletcher reference, and since the Examiner has now made the Fletcher reference of record, the October 18, 2002 supplemental information disclosure statement is considered to be adequately addressed. However, applicant respectfully requests that the supplemental information disclosure statement filed May 18, 2004 be considered, and an initialed copy of the form PTO-1449 be provided to applicant.

#### V. CONCLUSION AND AUTHORIZATION OF DEPOSIT ACCOUNT

In view of the foregoing, applicant believes that claims 1-33, 125-127 and 129-137 are all allowable and the same is respectfully requested. If any impediment to the allowance of these claims remains after entry of this Amendment, and such impediment could be

alleviated during a telephone interview, the Examiner is invited to initiate the same.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 50-0836.

DATED this 1 day of December, 2004.

Respectfully submitted,

A handwritten signature in cursive script, reading "Karl R. Cannon", is written over a horizontal line.

Karl R. Cannon  
Attorney Registration No. 36,468  
Attorney for Applicant

Clayton, Howarth & Cannon, P.C.  
P.O. Box 1909  
Sandy, UT 84091  
Telephone: (801) 255-5335  
Facsimile: (801) 255-5338

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